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The Syndicated Loan Market: Developments in the North American Context

by

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The views expressed in this paper are those of the author.
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Abstract

The author describes the rapid development of the syndicated corporate loan market in the 1990s. He explores the historical forces that led to the development of the contemporary U.S. syndicated loan market, which is effectively a hybrid of the investment banking and commercial banking worlds. He suggests that there has been a notable change in large corporate lending over the past decade, as the old bilateral bank-client lending relationships have been replaced by a world that is much more transaction-oriented and market-oriented. The Canadian syndicated loan market has been strongly influenced by its U.S. counterpart, but it is not yet at the same level of development.

The author explores potential risk issues for the new corporate loan market, including implications for the distribution of credit risk in the system, risks in the underwriting process, the monitoring function, and the potential for risk arising from asymmetric information.

JEL classification: G10, G21
Bank classification: Financial institutions; Financial markets

Résumé

L'auteur retrace les étapes de l'expansion rapide qu'a connue le marché des prêts consortiaux aux entreprises dans les années 1990. Il étudie les forces historiques qui ont mené au développement, aux États-Unis, de ce marché qui se situe à la confluence des services bancaires d'investissement et des services bancaires commerciaux. Il avance que la dynamique du crédit aux grandes entreprises a considérablement évolué au cours de la dernière décennie, les anciens rapports bilatéraux entre banques et clients ayant fait place à une orientation beaucoup plus nette vers les opérations et le marché. Le marché canadien des prêts consortiaux a été fortement influencé par son pendant américain, mais il n'a pas encore atteint le même degré de développement.

L'auteur explore les risques potentiels que pose le marché actuel des prêts aux entreprises, notamment du point de vue de la répartition du risque de crédit dans le système, ainsi que les risques relatifs au processus de prise ferme, à la fonction de surveillance et à l'asymétrie de l'information.

Classification JEL : G10, G21
Classification de la Banque : Institutions financières; Marchés financiers

1. Introduction

The syndicated loan market, a hybrid of the commercial banking and investment banking worlds, is globally one of the largest and most flexible sources of capital. Syndicated loans have become an important corporate financing technique, particularly for large firms and increasingly for mid-sized firms.

In recent years, Canadian banks have become more and more active in the global syndicated loan market, particularly in the U.S. market, and have assumed larger credit exposures. This paper focuses on the U.S. syndicated loan market itself, which currently totals over $2 trillion in drawn and undrawn commitments. The U.S. market has been at the forefront of important innovations in corporate syndicated lending that have—or are expected to—spread to other markets. This paper tries to explain the confluence of circumstances that led to these innovations. While the Canadian syndicated loan market is not at the same level of development, it is being influenced by events in the United States.

Corporate lending has historically been viewed as a key function, perhaps the core function, of commercial banks. For many years in North America, corporate lending primarily involved a series of bilateral arrangements between the borrower and one or more individual banks. These arrangements were supplemented by occasional "loan club" syndications, a technique whereby very large loans were shared among a number of banks. This earlier version of the syndicated loan market was essentially a private market with no transparency or liquidity (Asarnow and McAdams 1998).

In contrast, the "new syndicated loan market," in its most developed state in the United States (and increasingly in other nations), comprises an active market-driven primary distribution process and an active secondary loan market to facilitate adjustments after the primary syndication phase. Thus, the corporate loan market has come to assume some of the features of publicly traded bond and equity markets. In this new world of banking, lending is conducted on a transaction-by-transaction basis, reflecting multilateral lending structures (Chart 1). Some have argued that this new lending environment is based less on a relationship between borrower and lender and is more transaction-oriented. While in some cases this may be true, in recent years banks have made it increasingly clear that their willingness to provide any corporate lending (in syndicated or bilateral form) is very much dependent on the profitability of the overall relationship with the client.

Syndicated loans (as utilized both during the primary-distribution phase and in subsequent secondary-market trading) can be viewed as one of a group of "credit-risk-transfer" instruments

that have emerged over the past decade and that permit financial market participants to tailor more precisely their credit-risk exposures. Other rapidly expanding types of credit-risk-transfer instruments include asset securitizations and credit derivatives (Bank for International Settlements 2003).

In fact, the origins of many of the features of the contemporary syndicated loan market in the United States go back to the period of corporate restructuring, strategic buyouts, and leveraged acquisitions, which started in the 1980s, when lenders were looking for more efficient ways to manage their rapidly expanding credit exposures. In the 1990s, this market continued to evolve in the context of global trends for financial innovation, greater integration of capital markets, and more efficient pricing of all financial instruments. Today, the global syndicated loan market operates as a true capital market that is more professional, efficient, and transparent than its earlier incarnation, as evidenced by an evolving set of standardized institutional arrangements.

The significant changes in recent years that have contributed to the evolution of the new corporate loan market include:

- The emergence of a group of large syndication banks that operate more like investment banks than commercial banks, focusing on earning fees from leading syndications rather than earning interest-spread income by holding loans to maturity. These "lead banks" have traditionally had the role of intermediating the competing interests of the borrower on the one hand and the lending institutions in the syndicate on the other. In the literature, however, some have argued (and lead banks will dispute this) that the balance has shifted in recent years, with the lead bank tending to view the borrower as its client.

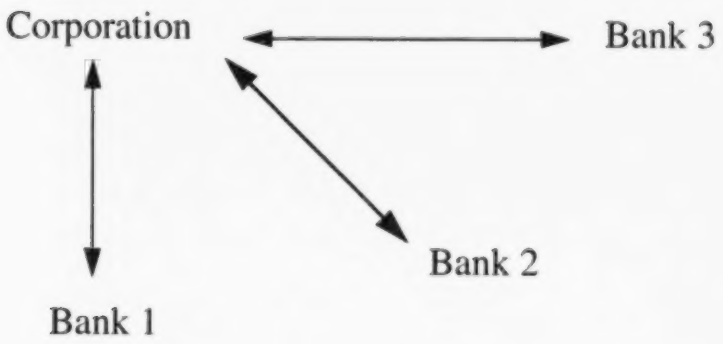
- The rapid growth in the non-investment-grade portion of the market, which offers higher fees to underwriters and higher yields to investors than the more straightforward investment-grade market.

- The emergence of syndicated loans as a new asset class with a unique set of investment properties, which has attracted the participation of non-bank institutional investors. This development has been facilitated by the introduction of credit ratings on loans from the major ratings agencies and the development of commonly accepted price and rate-of-return indexes to facilitate comparisons with other asset classes.

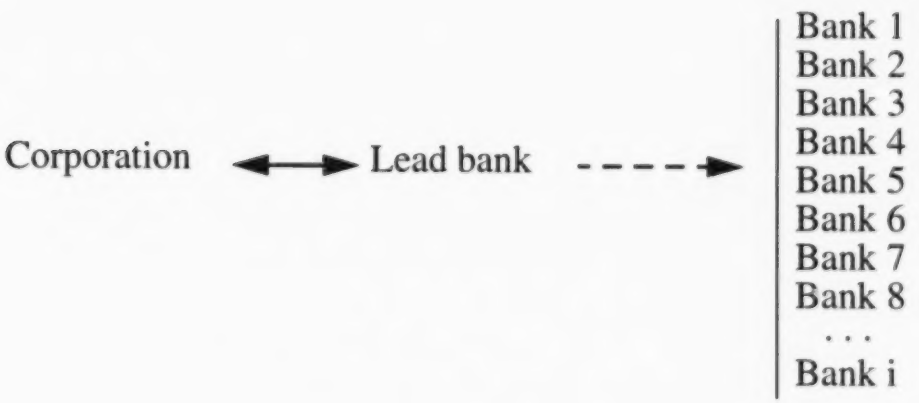
- The growth of an active and relatively liquid secondary market for loans, supported by standardized trading arrangements.

Chart 1: The Old Bilateral Lending World Versus the New Multilateral Lending World

A. The old bilateral world



B. The new multilateral world



2. The ABCs of Loan Syndication

2.1 The basics

A syndicated loan can be defined as two or more (often a dozen or more) lending institutions jointly agreeing to provide a credit facility to a borrower (Dennis and Mullineaux 2000).[1] While syndicates have many variations, the basic structure involves a lead manager (the agent bank) that will represent, and operate on behalf of, the lending group (the participating banks).[2]

In principle, virtually any type of corporate and commercial loan or credit facility can be syndicated. These include term loans, revolving credit facilities (offering the borrower the right, but not the obligation, to draw down a loan), and standby facilities (lines that are expected to be used only under extraordinary circumstances, such as market disruption). More specialized facilities, such as construction loans, export finance loans, and bridge finance facilities, can also be syndicated.

Syndicated credit facilities tend to be of medium-term maturity (one to five years), although facilities have been arranged for as short as three months and as long as 20 years. The interest rate of a syndicated facility floats, in contrast to the fixed-rate instruments found in debt markets. The floating rate is reset periodically, usually every one, two, three, or six months. In general, these facilities are not callable by the borrower.

Large loan-syndication packages today frequently comprise multiple loan tranches with different features and terms. The shortest maturity or maturities (typically labelled "A") are targeted at traditional bank purchasers. Longer-term tranches (named "B," "C," "D," and "E") tend to be designed for institutional investors, such as insurance companies and investment funds, with longer investment horizons (typically seven to nine years).

2.2 Syndicate structure and operation

A syndicate consists of a group of lenders that agree jointly to make a loan to a borrower, with all lenders sharing common loan documentation (Dennis and Mullineaux 2000). Lead banks compete vigorously to win the "mandate" to form and manage syndicates on behalf of the borrower. The syndicate is created to arrange or underwrite a particular loan and notionally disbands upon the

1. In the U.S. syndicated loan market, it is not uncommon to have 50 or 60 institutions in a syndicate. In the Canadian market, syndicates tend to have only 7 to 10 institutions.
2. It is probably more accurate to refer to syndicated credits than to syndicated loans, because more than loans can be syndicated.

completion of the loan. Syndicates, however, tend to show a certain "adherence," in that the same lead bank can frequently bring together more or less the same syndicate for the same borrower.

When referring to syndicate structure, one typically refers to both the size of the syndicate (i.e., the number of participating institutions) and its composition, meaning the share of the loan allowed to the various types of participants. Discussion of syndicates can be confusing, because of the variety of titles that can be assigned to the various roles or "brackets." For example, the lead bank can also be called the agent bank, or the arranger or book-runner.[3] For large transactions, the lead bank can bring in one or more co-leads. Further down the hierarchy, there might be managers or agents, co-managers and co-agents, and, finally, participants, each being allocated successively smaller portions of the loan. The higher an institution's ranking in the syndicate, the greater its share of the pool of underwriting fees, reflecting notionally the greater amount of risk and labour entailed.[4] Chart 2 illustrates a hypothetical but representative syndicate structure for an investment-grade credit facility.

Syndicate practices can also vary, depending on the individual transaction. For example, the lead bank usually, but not always, takes the largest portion of the loan. In some cases, the entire loan will be sold to the participating institutions (Dennis and Mullineaux 2000). From a legal viewpoint, each participating institution is a direct lender to the borrower from the inception of the loan, with every participant's claim on the borrower evidenced by a separate security note. There is only one loan agreement for the syndicate, however, that documents the contractual arrangements between the borrower and the lending group.

The lead bank or arranger that leads the loan frequently coordinates administrative operations, including the documentation process, the loan closing, the handling of loan advances, and the administration of repayments. Alternatively, another bank high up in the syndicate—referred to as the administrative agent or documentation agent—may be appointed to handle these functions. The lead bank or arranger is typically granted an important coordination role for the syndicate. For example, significant changes to the terms of the loan (as laid out in the loan agreement) would normally require the lead bank to obtain the approval of a majority of syndicate members. Similarly, the lead bank would normally not declare a borrower to be in default on the loan before consulting with the members of the syndicate.

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3. The book-running function refers to the arranger's role in selecting the number and identity of institutions that will be invited to participate in the syndication, the bracket or syndicate category they would be offered, and the amount of their allotment.
4. Banks higher in the syndicate—the lead bank being the highest—earn higher fees, because they take a larger part of the facility and the percentage fee rate applied to their share of the facility is higher.

Chart 2: Sample Syndicate Structure
$1 billion Investment-Grade Mergers and Acquisitions (M&A) Facility
(amounts in $ millions, fees in basis points)

Role	Allocation	Fees
Lead bank or arranger	60	125
Lead agents		
Bank 1	35	40
Bank 2	35	40
	35	40
Co-agents		
Bank 1	30	37.5
↓	↓	↓
Bank 14	30	37.5
Participating institutions		
Institution 1	20	25
↓	↓	↓
Institution 17	20	25

2.3 The syndication process

2.3.1 The mandate

To initiate a syndication, the lead bank or arranger has to win a mandate from the borrower to lead the issue. In today's market, it is not uncommon for a lead bank to take the initiative and bring a financing proposal to a potential borrower. Alternatively, the borrower can initiate the transaction, outlining the broad parameters of the financing. There may be competing bids from several lead banks that submit their proposed terms, including borrowing rate, fees, underwriting method (firm commitment versus best efforts—see section 2.3.2), size, timing, and key loan covenants. The borrower will normally nominate the lead bank that proposes a loan package closest to its own requirements. The winning lead bank must be aware that by agreeing to undertake a package that is very attractive to the borrower, there is a risk that such an aggressive package will be difficult to syndicate to other banks.

2.3.2 Nature of the underwriting commitment

A key part of the mandate is the nature of the underwriting commitment. A syndication can be carried out using two basic approaches: "best-efforts" or "firm-commitment." Chart 3 illustrates these two methods.

Under the best-efforts approach, the lead bank reaches an agreement with the borrower on the proposed size of the borrowing and the key terms of the loan agreement. The lead bank (and co-leads, if there are any) will typically agree to take a certain minimum portion of the planned financing, with the remaining amount to be syndicated or marketed to a group of banks and other institutions.[5]

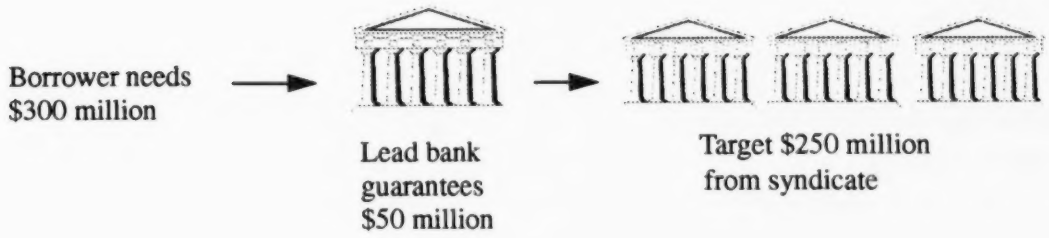
Under this approach, at the start of the financing the lead bank does *not* guarantee the borrower that it will be able to obtain the required funding it wants at the desired terms. The final size and terms of the loan will depend on the success of the subsequent syndication or marketing process. The lead bank frequently reserves the right to cancel the syndication if a sufficient amount of the loan is not subscribed to by other banks. The borrower can also choose to cancel if it becomes evident that sufficiently attractive terms cannot be obtained.

In contrast, under the firm-commitment approach, the lead bank makes a legally binding commitment to the borrower to underwrite the entire amount of the loan, in the event that the loan

5. This syndicate may already exist as the result of recent financing for the borrower, or it may have to be put together virtually from scratch.

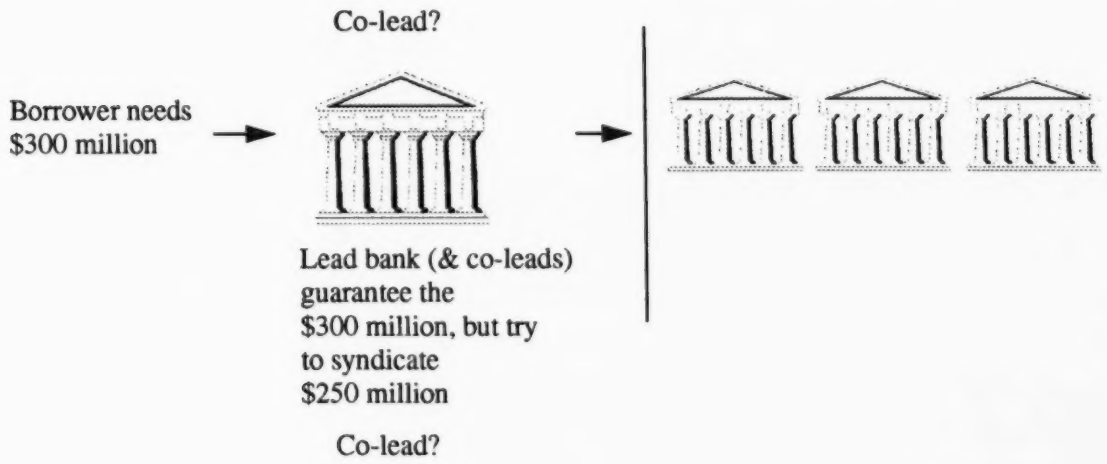
Chart 3: Underwriting Techniques used in Syndication

Best-efforts approach



Lead bank can cancel the issue if the syndicate does not taken a certain minimum amount.

Firm-commitment approach



Lead bank can bring in one or more co-underwriters to share the risk and help distribute the loan.

cannot be successfully syndicated. Thus, the lead bank usually assumes substantially more underwriting risk than with the best-efforts approach. The lead bank is compensated for this greater risk through higher fees paid by the borrower.

2.3.3 Syndication

Once the mandate is awarded, the arranger is ready to start the syndication process. This is called the primary-distribution phase of the loan. The syndication unfolds as a multi-step process that is similar, in many ways, to the underwriting of a corporate bond or stock issue.

The lead bank prepares an information memorandum that contains descriptive and financial information about the borrower and the proposed loan. Recipients of the memorandum are subject to a confidentiality agreement, by which they agree not to disclose sensitive information. The lead bank and the borrower meet with prospective participant banks, describe the borrower's business plan and prospects, and answer any questions about the issue. The intention is to convince a sufficient number of banks to participate in the loan for the targeted amount, ultimately leading to the formation of the syndicate.

In the case of a large loan, the lead bank can bring in one or more co-underwriters to assume a portion of the underwriting risk. The underwriter and co-underwriters then syndicate or distribute the loan by trying to obtain commitments from potential participating banks or other types of investing institutions.

Under the best-efforts approach, the size of the loan could be scaled back from the original plan or even cancelled if buying interest proves too weak. In contrast, under a firm-commitment approach, to the extent that it is unsuccessful in these efforts, the lead bank (and any co-underwriters) could be faced with potential losses unless the borrower is prepared to adjust the original terms.

The relative reliance on these two underwriting techniques can vary, depending on current corporate finance developments. For example, the firm-commitment approach is used more in an active deal-making environment, where there are frequent mergers and acquisitions. Corporations are willing to pay the higher fees for the assurance of knowing that the entire financing for such a transaction is committed. In a less-active or nervous market environment (as in late 2002 and early 2003), the best-efforts approach tends to be the primary-distribution technique of choice: borrowers may feel no need to pay the higher fees or lead banks may be more reluctant to assume the higher risks of the firm-commitment underwriting.

2.3.4 Loan versus bond syndication

As alluded to earlier, loan syndications have come more and more to resemble bond underwritings, but there are some important differences.

In the case of underwriting a bond, the lead investment bank distributes securities to dealers in the syndicate for ultimate resale to investors. In the case of loan syndication, the lead bank allocates portions of the loan to participating institutions, which in most cases want to hold the loan rather than distribute it, although they may subsequently buy and sell portions of the loan to fine-tune their exposure.

Furthermore, the lead bank in a loan syndication is quite likely to have a significant position in the loan once the distribution phase is over. In contrast, the lead underwriter in a bond issue is unlikely to hold the bonds as a long-term investment, although it may hold some in its inventory to fulfill a role as a market-maker. Similar to the bond market, the loan market offers a secondary market to support the offering after the primary distribution phase; this applies much more to the U.S. loan market than to the Canadian loan market, which has very little secondary market activity.

2.4 Secondary market techniques

Following the primary distribution of the loans, secondary distributions can be carried out through loan sales and purchases. These transactions are of two types: assignments and participations (Simons 1993).

Under an assignment, there is a sale between two members of the syndicate or between a syndicate member and a bank outside the syndicate. As a result, a new financial obligation is created between the borrower and the loan buyer that replaces the contract between the borrower and the original lender. Assignments are recorded on the books of the agent bank, the consent of which is generally required. The consent of the borrower is also often required. The new buyer becomes the direct lender of record and is entitled to full voting privileges with respect to decisions of the syndicate. Participants in the original syndication can adjust their loan holdings by assigning all or portions of them to third parties.

The other type of secondary transaction, a participation, creates a contract between the original lender and a loan buyer, whereby the buyer becomes a participant in a share of the primary lender's loan. The original contract does not change as a result of a participation; the borrower

may not even be aware that all or a portion of the loan has been sold. Typically, the buyer of a participation does not have full voting privileges.

Assignments appear to be largely supplanting participations in the contemporary loan market and provide an important adjustment mechanism for lenders after the primary-distribution phase.[6]

3. Historical Development of the Syndicated Loan Market

Syndicated lending seems to have had its origins in the 1960s in the international banking market (Rhodes 2000). The birth of the Euro-dollar market and the development of the cross-border interbank market have led multinational groups of lenders to come together as syndicates to participate in large loans, primarily to governments, but also for corporate credits. Thus, the basic techniques of syndication were initially developed in the international arena, where innovation has traditionally proceeded at a faster pace than in the more regulated national domestic markets.

The pace of financial innovation in major domestic financial markets began to accelerate in the 1980s and even more so in the 1990s, typically led by developments in the United States. Until that time, corporate borrowers had maintained a number of bilateral loan arrangements with various banks. This gave them more control but was administratively inefficient and costly (Barnish, Miller, and Rushmore 1997). Syndications, in the sense of sharing very large loans through an informal "loan club" of banks, occurred occasionally.[7]

In the late 1980s, activity in the U.S. domestic syndicated loan market exploded to finance the heavy activity in a relatively new type of transaction: the leveraged buyout, or LBO (Loan Pricing Corporation 2001).[8] To handle this activity, a new type of loan syndication process was pioneered

6. Assignments are considered to be a full sale for accounting and regulatory purposes, whereas participations are not.

7. The term "loan club" is sometimes used in the banking industry as another term for a syndication. In the banking literature, however, writers often distinguish between the old loan club approach to syndication (which was the norm prior to the 1980s) and the more market-driven contemporary syndicated loan market. (Loan club-style syndications are still occurring today.) A loan club deal typically involves a smaller group of banks brought together by the borrower (rather than a lead bank), with the borrower doing much of the administrative work rather than a lead or agent bank. In fact, there may not even be a lead bank in a loan club, or a lead bank may take a lower profile in running the syndicate. A loan club would always involve a best-efforts primary distribution, rather than the firm-commitment or underwriting approach needed to finance mergers and takeovers. A loan club may or may not involve a common loan agreement, which is the norm for contemporary large multi-bracket syndications.

8. With these deals, LBO-specialty sponsor firms would acquire companies or units of companies that were considered top-heavy or unproductive. These purchases were typically financed by a split of 50 to 60 per cent bank loans (secured by assets of the company being acquired), 25 to 40 per cent high-yield bonds, and roughly 10 per cent or less equity capital.

by the major New York money-centre banks, which established loan distribution operations to arrange, underwrite, and distribute pieces of large corporate loans to syndicates of banks (Barnish, Miller, and Rushmore 1997). The leveraged loans issued to finance LBO transactions tended to be large and risky.[9] Thus, a more efficient and liquid loan market began to develop to manage these exposures more effectively.

The 1990–91 recession triggered further change in the U.S. loan market. As credit conditions experienced a cyclical deterioration, banks substantially reduced their lending to the riskier leveraged loan market and tended to concentrate on loans to investment-grade companies.[10] During this period, prime borrowers became cognizant of the rapidly developing "new style" syndication market, which seemed to offer the possibility of raising larger amounts at attractive terms in a tight time frame.[11] This was advantageous to facilitate the financing of acquisitions and other strategic corporate transactions. Corporate treasurers also perceived an increasingly liquid secondary loan market that was becoming available to facilitate portfolio adjustments after the primary process.

As a consequence, top-tier corporate borrowers began increasingly to move away from the old bilateral arrangements to the transactions-centred world of contemporary syndications. Thus, during this period, the new syndication process was successfully translated from the leveraged loan market (for which it was originally introduced) to the investment-grade loan market.

The next important evolutionary step occurred during 1995–97, when syndicated loans evolved as an asset class. Many institutional investors (such as pension funds, mutual funds, and insurance companies) began to seriously consider syndicated loans as an alternative investment to bonds and debentures.

These developments laid the groundwork for the contemporary corporate loan market.

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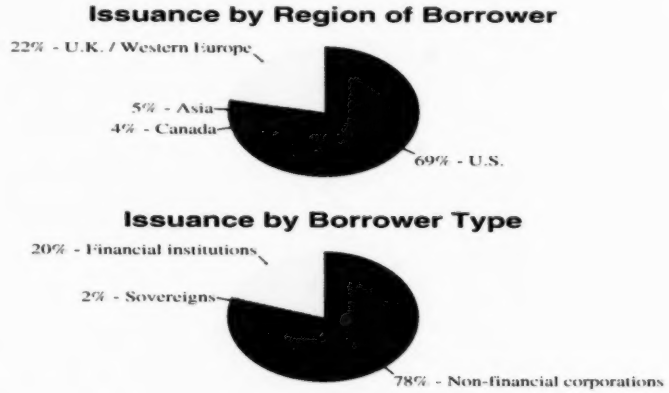
9. *Leveraged* is the term frequently used in the loan market to describe credits that are lower rated or less than investment-grade. These firms make relatively greater use of leverage or debt financing instead of equity in their capital structure. In fact, the borrowing spread is frequently a direct function (according to a grid) of measures such as the debt-to-equity ratio or the cash flow-to-debt service ratio.
10. The banks were also under pressure during this period to improve their capital ratios, because new regulations falling out of the 1988 Basle Accord were coming into effect in 1993.
11. Investment-grade corporations had always participated in old-style loan club syndications to some extent.

4. Overview of the Market

4.1 The global syndicated loan market

The syndicated loan market is truly a global market.[12] Rhodes (2000) reports that, in 1999, the global syndicated market accounted for almost US$2 trillion of gross issuance of new credit facilities, resulting from over 9000 individual syndication transactions. Over the period 1995–99, U.S. issuers accounted for an average of 69 per cent of the US$8.1 trillion gross issuance, and Canadian borrowers about 4 per cent. Western Europe and the United Kingdom accounted for about 20 per cent, and Asia 5 per cent (Chart 4).

Chart 4: Global Syndicated Loan Market - (1995-99)
(US$8.1 trillion)

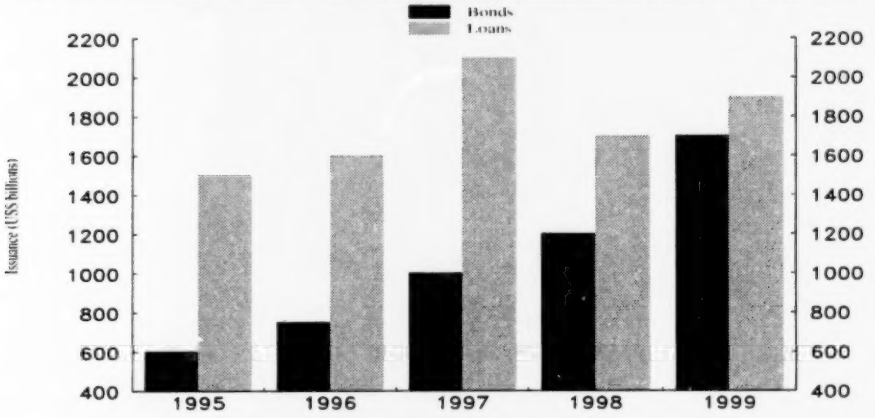


Source: Rhodes (2000), exhibit 1.8

Over that same 1995–99 period, non-financial corporate borrowers accounted for over 75 per cent of all issuance, financial institutions 15 to 20 per cent, and the sovereign sector (nation states and international organizations) the remainder. In recent years, sovereigns have tended to rely on bond markets for most of their financing needs, turning to the syndicated loan market only occasionally when public debt markets are not sufficiently receptive (Rhodes 2000). Chart 5 shows the global gross issuance of syndicated loan facilities versus bonds.[13]

12. The three major centres of syndicated lending are in New York, London, and Hong Kong, with important regional centres in Singapore, Tokyo, Frankfurt, Paris, Amsterdam, Luxembourg, Madrid, Chicago, Sydney, and Toronto.
13. It would be useful to consider this information on a net issuance basis, but such data for the syndicated loan market do not seem to be available.

Chart 5: Global Gross Issuance of Syndicated Loans versus Bonds



Source: Capital DATA Loanware and Bondware

4.2 The U.S. syndicated loan market

A reasonably comprehensive measure of outstanding loans is provided by the Shared National Credit (SNC) program, a database maintained by the U.S. Federal Reserve Board.[14] The program covers any loan or loan commitment of at least $20 million that is shared by three or more supervised institutions; analysts believe that these data cover a very large proportion of the market. Table 1 lists various measures of the U.S. syndicated loan market using SNC data.

14. The SNC program was established jointly in 1977 by the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC), to provide an efficient and consistent review and classification of syndicated loans.

Table 1: Measures of U.S. Syndicated Loan Market using SNC Data (US$ billions outstanding or as noted)

	1996	1997	1998	1999	2000	2001	2002
Size of facilities	$1,200.6	1,435.5	1,759	1,829.4	1,950.0	2,050	1,900
Number of facilities	8,319	9,099	10,389	8,974	9,848	10,146	9,328
Number of borrowers	5,607	6,058	6,710	5,587	5,844	5,870	5,542
Loan balances drawn down under the facilities	$372.5	423.0	561.5	630.4	701.0	769.0	692.0
Drawdown ratio (%)[a]	31	30	32	34	36	38	36

a. Defined as the amount of outstanding loans expressed as a percentage of the size of the credit facility.
Source: Federal Reserve Board

Table 1 shows that total syndicated credit facilities increased from $1.2 trillion in 1996 to almost $2.1 trillion in 2001. The corresponding loan balances drawn under these facilities increased from $373 billion to $769 billion, with the average drawdown ratio (loan balances divided by facility size) increasing from 31 per cent to 38 per cent. We have calculated (using Federal Reserve data for U.S. commercial and industrial (C&I) loans) that over this period loan balances under syndicated facilities rose from 40 per cent to 54 per cent of C&I loan balances.

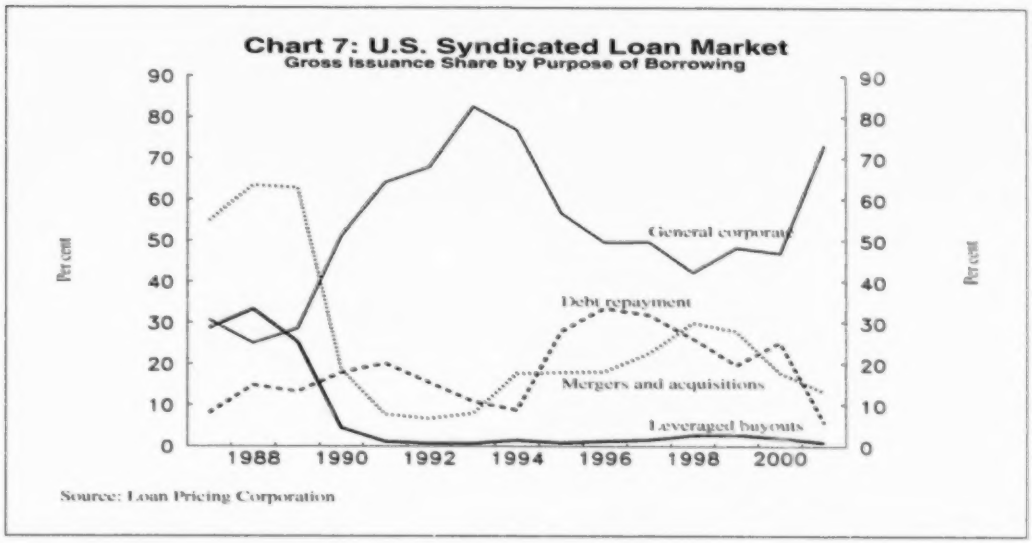
Another available dataset is provided by a New York-based data-collection and research firm, Loan Pricing Corporation (LPC), which compiles information on U.S. loan syndication transactions. These syndication data are presented on a flow basis (annual gross issuance of new credit facilities). Chart 6 shows that in the U.S. market, gross issuance of facilities rose from $241 billion in 1990 to $1,196 billion in 2000, an annual compound growth rate of 17.4 per cent.

While the underlying SNC and LPC datasets may not be identical, there is good reason to believe that they both cover most of the U.S. syndication market. Thus, it seems reasonable to look at them in combination to glean additional information about the market. A comparison of the SNC outstanding facilities data and the LPC gross issuance of facilities data implies a substantial rollover or refinancing activity in the U.S. syndicated loan market. To illustrate, SNC data in Table 1 show a net increase in outstanding syndicated facilities of about US$850 billion over the period 1996–2001. The LPC data covering that same 5-year period in Chart 6 show gross issuance of facilities of a little over $5.0 billion, suggesting refinancings or rollovers of roughly US$4 billion. The high level of refinancing seems plausible, because many of the facilities, particularly the investment-grade variety, have relatively short maturities.

A key breakdown in the syndicated loan market is between investment-grade and "leveraged" (non-investment-grade) lending.[15] Chart 6 shows that, in the late 1990s, gross issuance of leveraged loans rose for a number of years to a peak of about one-third of gross lending before easing.

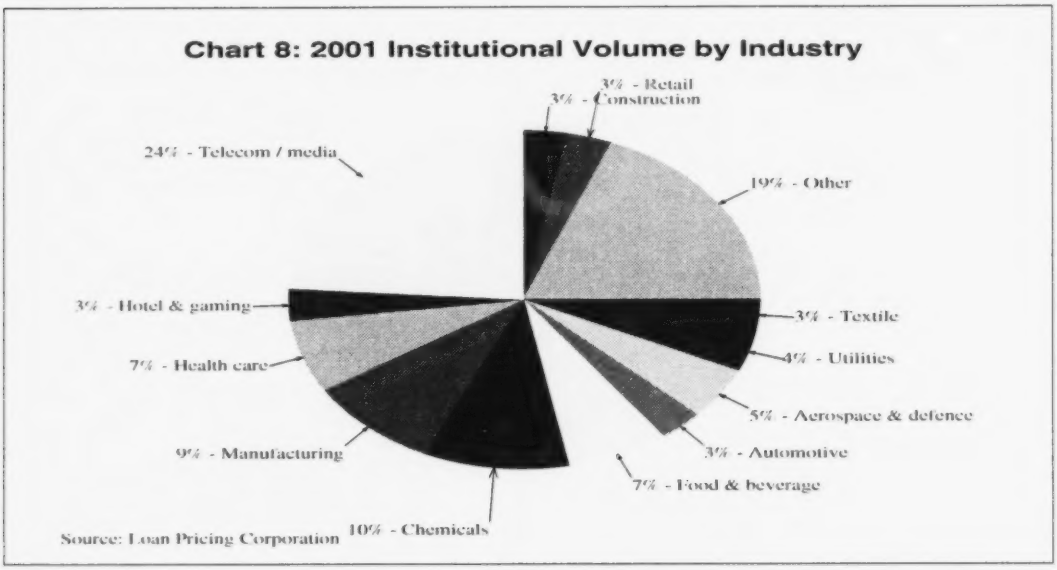
The leveraged loan market is sometimes further subdivided into the regular leveraged segment, paying spreads of 150 to 249 basis points or more over LIBOR, and the highly leveraged market, paying 250 basis points or more over LIBOR (Barnish, Miller, and Rushmore 1997, 80).[16]

15. Leveraged or subinvestment-grade lending should not be equated with leveraged buyouts. Leveraged buyouts comprise only one part of the overall leveraged lending market.
16. LIBOR is the interest rate that the largest international banks charge each other for short-term loans.



Another way of looking at the historical trends in syndicated loan volumes is by broad activity type. LPC categorizes the lending activity according to broad purposes: general corporate; debt repayment; mergers and acquisitions; and LBOs, which include bridge loans. Chart 7 shows that the broad category of general corporate is currently the largest, at 70 per cent of the total. Mergers and acquisition loans were very important in the late 1980s and rose again in the late 1990s during the stock market boom, but have since come down. Leveraged buyouts were most important in the late 1980s and are currently a relatively small part of the market.

The syndicated loan market finances a broad cross section of industry groups. Chart 8 summarizes the industry breakdown in 2001 by the value of issues completed. The telecom and media sector was by far the largest, with a 24 per cent share.



4.3 Important features of the syndicated loan market

This section focuses on the key structural features of the most developed U.S. version of the syndicated loan market. It distinguishes between the two major classes of borrowers (investment-grade and leveraged) and describes recent infrastructure developments that have led to a more efficient and transparent market.

4.3.1 The borrowers: investment-grade versus leveraged

The two borrower segments of the syndicated loan market are the investment-grade sector and the leveraged sector, each of which has some distinct features (Madan 1999).

The most common use of investment-grade syndicated loan facilities is to provide standby lines of credit to commercial paper issuers (including issuers of securitized or asset-backed commercial paper).[17] These facilities, involving "plain vanilla" structures and the highest-quality borrowers, are relatively straightforward to put together and most of them are not expected to be used. Therefore, the fees earned by members of the syndicate on these types of transactions tend to be very low. A significant proportion of these facilities (75 to 90 per cent) are originally structured as 364-day facilities. This is attractive for commercial banks, because under the original BIS risk-weighted capital formula the capital charge is lower for facilities with terms of one year and under.

17. These facilities provide temporary support to commercial paper issuers during periods of market disruption, when they are having difficulty rolling over their maturing paper.

Purchasers of investment-grade loans tend to be mainly the commercial banks. In general, banks appear to be more willing than other institutions to accept the relatively low yields on these loans as the price paid to obtain a relationship with a large corporate client. This strategy can lead to more lucrative forms of business, such as equity underwriting and investment management. This inducement likely applies more to the lead banks than to the participating banks in the syndicate.

Underwriting profitability is higher for the 25 per cent or so of investment-grade volumes derived from mergers and acquisitions. These transactions tend to be more complex than commercial paper standby facilities, and therefore can command higher fees.

The leveraged part of the syndicated loan market has in recent years been the fastest-growing segment of the market. Madan (1999) estimates that the leveraged segment accounted for only about one-third of the value of transactions in 1998 but represented about three-quarters of the fees earned by syndicating banks in this market. The boom in leveraged lending in the late 1990s was driven by a number of factors, including the wave of mergers and acquisitions, a spurt of leveraged buyouts (often referred to as "sponsored deals," because they are originated by LBO sponsor firms), and the financing of industries with large capital requirements during that period, such as the telecom and media sector.[18]

The main purchasers of leveraged loans tend to be institutional investors, such as insurance companies, hedge funds, "prime rate" funds (mutual funds that specialize in investing in corporate and commercial loans), and securitization vehicles (e.g., the special-purpose entities that issue collateralized loan obligations). These institutions tend to have little interest in the narrow interest spreads of the investment-grade portion of the market, preferring the higher yields of the leveraged market. Madan (1999) estimates that, by 1999, there were approximately 120 institutional investors purchasing loans in the United States, compared with about a dozen in the early 1990s.

18. Madan (1999) finds that, in 1998, a typical leveraged transaction of $1 billion or more was financed 40 per cent by bank loans, 30 per cent by high-yield bonds, and 30 per cent by equity. For smaller transactions, the bank loan proportion was higher. In general, the leveraged buyouts of the late 1990s had fewer financial difficulties than those in the 1980s, because of the relatively higher amounts of equity (relative to debt) supporting the more recent transactions.

4.3.2 Market infrastructure developments leading to greater efficiency

Many of the most important recent developments in the bank loan market involve making the market more transparent and liquid, which should lead to greater efficiency. Ultimately, efficiency involves financial markets fully reflecting the forces of supply and demand accurately and quickly in market prices.

Bavaria (2002) argues that transparency, meaning the widespread availability of data and other market information, plays a crucial role in achieving efficiency. He adds that efficient markets must have "numerous participants, clear-cut roles for issuers, investors, and intermediaries, and an established infrastructure to support primary and secondary distribution of securities."

One important aspect that enhances the transparency of the loan market is loan ratings, introduced by the major credit-rating agencies: Standard & Poor's, Moody's, and FitchRatings. They have proven particularly useful for institutional investors that may not have the same in-house capability as the banks to analyze loan credit. The availability of objective third-party ratings (along with supporting information) has allowed these institutions to become more comfortable with loans as an asset class. If the borrower is willing to pay the fee, the ratings agencies are willing to provide a rating for any credit facility that is sufficiently large, for which adequate information is provided and which has a reasonable probability of being used.[19]

There is a difference between credit ratings for bonds and ratings for loans that arguably enhances the value of loan ratings (Barnish, Miller, and Rushmore 1997). Whereas bond ratings have been primarily an estimate of the probability of default, bank loan ratings take the analysis one step further and consider the loan's structural characteristics (covenants, other parameters of the loan agreement, and collateral support), in order to rate the loan not only according to its default risk but also its estimated loss rate; that is, the proportion of the loan not recovered by lenders.[20]

A second factor that has encouraged market efficiency is the emergence of an active secondary loan market in the United States. Secondary loan market liquidity first began to develop following the buildup of highly leveraged loan activity in 1989 (Barnish, Miller, and Rushmore 1997). Many banks became concerned with their concentrations in certain high-profile, highly leveraged loans. A handful of commercial and investment banks established loan trading desks to make markets in these loans, permitting lenders to adjust their loan positions.

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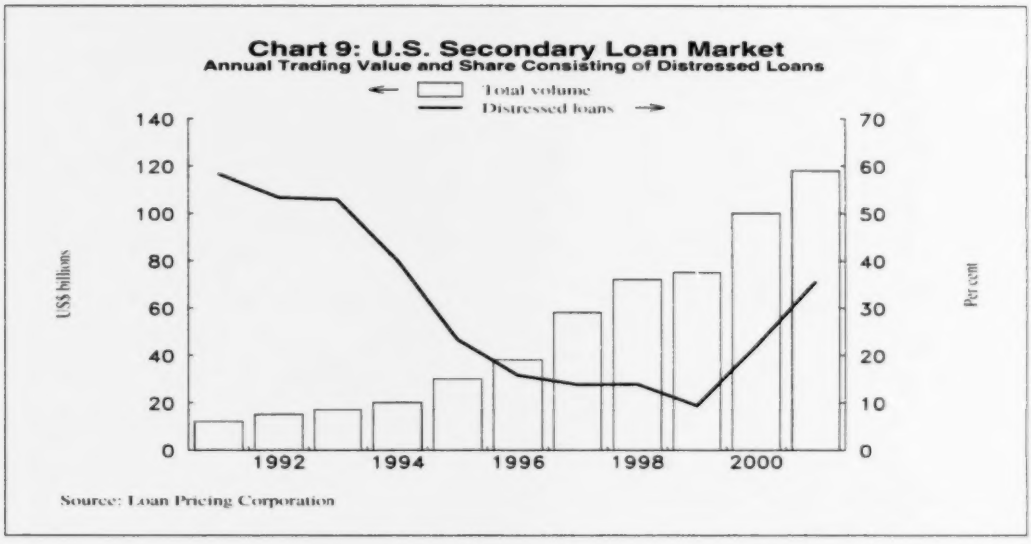
19. By early 2002, S&P was rating the loans of over 1,200 companies.
20. There is some evidence that bond ratings are evolving towards an approach similar to that currently applied to loan ratings.

Secondary loan trade volume (in syndicated and other corporate and commercial loans) accelerated sharply in the United States in the second half of the 1990s (Chart 9, left axis). The proportion of this trade that consisted of distressed loans (right axis) declined in the mid-1990s and started to rise late in the decade, standing at 35 per cent in 2001. The remaining trading volume consisted of par loans, or performing loans, of which, in 2000, approximately 80 per cent were leveraged loans and the remainder investment-grade loans.[21]



The development of a deeper market for distressed loans has given banks a useful barometer with which to better understand the underlying value of these loans and another alternative for dealing with them. Furthermore, the burgeoning secondary market for leveraged loans has had a strong influence on the primary market. Banks that originate syndicated loans use the market perspective provided by their traders to better understand and evaluate the underwriting of risk. Institutions that are primarily loan investors rather than originators use the secondary market as a source of investment product and to make portfolio adjustments. In recent years, the Canadian banks have been increasingly active in using the secondary loan market in the United States to adjust their U.S. portfolios.

21. Loans issued originally at a price of $100 are referred to as "par loans" as long as they trade at $90 or above. Below that point, they are classified as distressed. Loans generally do not trade at a premium price much above $102, because at that point they would usually be called (redeemed) by the borrower, which would refinance the loan at the more attractive interest rate implied by the premium price.

Another important development for the loan market was the formation in New York in 1995 of the Loan Syndications and Trading Association, Inc. (LSTA), which currently has over 70 members, ranging from commercial and investment banks and institutional investors to law firms, accounting firms, and consultants interested in the market (Taylor 1998). The LSTA's main goal is to promote the orderly development of a "fair, efficient, liquid, and professional trading market for commercial loans and other similar private debt."[22] Among the LSTA's activities are the following:

- producing standard trading documentation,
- establishing recognized market practices,
- publishing a trading code of conduct,
- publishing month-end prices,
- operating a multilateral netting facility for loan transactions, and
- establishing a forum for market participants to discuss important developments and exchange relevant information.

Although the LSTA is not a regulatory body, the standardized trade practices and documentation that it has developed and promoted have been important factors behind the rapid development of a liquid, secondary loan market. The LSTA also establishes committees to review topical issues concerning the industry, such as distressed loan trading and mark-to-market pricing.

5. Benefits of Loan Syndications for the Differing Participants

Typically, a successful financial innovation (e.g., the emergence of the new syndicated loan market in the 1990s) occurs when a number of the major types of market participants—but not necessarily all—are beneficiaries, meaning that the benefits for the agents of the innovation exceed its cost. In the case of syndicated loans, the range of beneficiaries is apparent.

5.1 Benefits of loan syndications for banks

The benefits of loan syndications for banks can vary according to the role of the bank in the syndicate. In general, the syndication technique allows lead banks (typically, the largest banks) to compete more effectively with the bond markets for corporate financing business. The technique enables them to utilize their expertise in loan origination and fee collection for structuring, distributing, and servicing large loans. At the same time, agent banks can tailor the degree of credit risk and interest rate risk they wish to retain by parcelling pieces of the loan through the syndication process. Furthermore, the syndication structure reduces the overall cost of loan origination because it spreads the burden among a number of banks (Madan 1999, 10).[23]

22. The Loan Market Association in London plays a similar role in the U.K. market.
23. Although other types of financial institutions can originate loans in this market, the majority of originators are banks.

By using the syndication technique, lead banks facing capital or liquidity constraints can continue to service the borrowing needs of an important client without having to undertake the entire loan. A bank near its regulatory limits with respect to the permitted size of an individual loan or total loans to a single borrower can still originate the loan and pass off a relatively large portion of it to the syndicate.

Participating banks may be motivated to join syndicates because they lack origination capabilities in certain geographical regions or in certain types of industries, or because they desire to economize on origination costs. A relatively small bank can lend to a large borrower that it normally would not obtain as a client by taking a share of a syndication. Thus, loan syndications are cost-effective methods by which participating banks can diversify their loan portfolios.

5.2 Benefits of loan syndications for borrowers: a more complete financing menu

Syndicated loan markets—notably, the type that have evolved over the past decade—provide borrowers with a more complete menu of financing options. In effect, the syndication market completes a continuum between traditional private bilateral bank loans and publicly traded bond markets. This has resulted in a more competitive corporate finance market, which has permitted issuers to achieve more market-oriented and cost-effective financing. Table 2 summarizes where syndicated loans fit on this corporate-finance continuum.

Table 2: Loan Instrument Characteristics, from a Borrower's Perspective

	Bilateral loans	Syndicated loans	Bond markets
Loan size	Lowest	Larger	Similar to syndicated loans
Public information disclosure	Lowest	Medium	Highest
Driving factor	Relationship	Relationship or transaction	Transaction
Covenants	Extensive and frequently renegotiated	Extensive but less frequently renegotiated	Fewer and looser covenants/rarely renegotiated
Borrowing rate	Floating rate	Floating rate	Fixed rate
Funding	Revolving credit or fully funded term loan	Revolving credit or fully funded term loan	Fully funded term obligation

Loan syndications also tend to be more administratively efficient for the borrower than a series of bilateral arrangements; e.g., there is only one loan agreement, rather than a series of loan agreements, as with bilaterals.

Of course, syndicated loans will not be the answer for every borrower—as in the case of companies that are seeking fixed-rate financing or companies that value the control and direct relationships with lenders that traditional bilateral arrangements entail.

5.3 Benefits of syndicated loans for institutional investors

As stated earlier, a notable development in the U.S. syndicated loan market over the past decade has been the participation of new types of investing institutions. These include pension funds, insurance companies, mutual funds (prime-rate funds), hedge funds, and the securitization vehicles that issue collateralized loan obligations and collateralized debt obligations and are typically managed by commercial and investment banks. These institutions, being investors rather than direct-lending institutions, view syndicated loans as simply another asset class that has a certain unique combination of risk and return properties.[24] They favour the higher-yielding leveraged part of the market, particularly the longer-term tranches.

24. One study done in the mid-1990s (Asarnow 1996) finds that, at that time, bank loans offered much more attractive ratios of return-to-risk (the so-called Sharpe ratio) than the various categories of bonds.

Madan (1999, 37) articulates why she believes institutional investors in the United States have come to increasingly appreciate loans more as an asset class. First, she suggests that the low volatility of investment returns on loans compared with other assets allows investors to more confidently leverage those investments (using derivatives and other techniques) to amplify returns. Second, the floating rate of bank loans, which provides a natural hedge against changing interest rates, appeals to some investors. Third, the security claim of bank loans is typically senior to bonds and debentures, resulting in a lower credit loss. Keisman and Miller (1998) show that bank loans in default tend to have substantially higher recovery rates than high-yield (non-investment-grade) bonds. Table 3 lists a range of asset-class features of leveraged syndicated loans, as compared with high-yield (non-investment-grade) bonds.

Table 3: Loan Instrument Characteristics from an Institutional Investor's Perspective

	Leveraged loans	High-yield bonds
Volatility of returns	Lower	Higher
Nature of return	Floating rate	Fixed rate
Ranking as creditor	Senior	Subordinated (lowest ranking)
Security	Typically secured	Typically unsecured
Expected credit losses	Lower	Higher
Prepayment features	Unrestricted prepayment—some longer-term loans have call protection	Call protection for a number of years
Term	Short	Longer
Frequency of payment	Monthly or quarterly	Semi-annual or annual

6. Summing Up: The Old Versus the New Loan Market

This paper has focused on the emergence of the new transaction-oriented corporate loan market, particularly in the United States, where credits are syndicated and traded much like bonds and shares in relatively transparent and liquid markets. This contrasts with the old loan market, with its reliance on long-standing bilateral lending relationships, supplemented by the occasional sharing of very large loans through an old-style loan club syndication.

Notable as these changes are, it is important to consider that they are still a work in progress; not every segment of the U.S.commercial and corporate loan market is at the same level of development. Bavaria (2002, 2) points out that:

> . . . many smaller loans are still arranged, distributed, and held to maturity in the same way that they were 10 to 15 years ago. Larger syndicated loans, however, tend to take full advantage of the features of the new market. This means that they are underwritten, distributed, and later on traded among investor portfolios in a manner much like public bonds. But in general there has been an inexorable trend towards an efficient market.

Bavaria's summary of the differences between the two markets is shown in Table 4.

Table 4: Loan Market Characteristics Then and Now

Old loan market	New loan market
Opaque (information closely held)	Transparent (information widely available)
No credit ratings or third-party research	Credit ratings, independent data, and research
Club lending with specialized credit knowledge	Numerous investors
Negotiated or relationship pricing	Competitive pricing with comparative pricing information available
Banks play both intermediary and investor roles	Intermediary and investor roles more distinct
"Buy and hold" lenders	Portfolio theory and secondary trading used to manage portfolios
Documentation and distribution protocols unique to agent bank	Standardized instruments and established trading protocols

The author suggests that some of the distinguishing features of the contemporary loan market tend to be mutually reinforcing. For example, banks can be more confident applying sophisticated portfolio-management techniques to their loan portfolios if they know there is a liquid secondary market to permit them to rebalance their portfolios as needed. Similarly, institutional investors can participate in the loan market with more assurance, given the availability of credit ratings and independent research related to that market. Furthermore, the availability of quotations in the secondary loan market helps them mark-to-market their portfolios.

An interesting consequence of activities in the new syndicated loan market is that loans begin to demonstrate many of the features of marketable bonds. The pricing between the syndicated loan and bond markets has converged, and hybrid instruments with some of the features of both have appeared.

This convergence of the two markets' features should not be overstated. For example, while developments with respect to a secondary loan market have been impressive, loan market liquidity is not comparable with that of the U.S. Treasury or corporate bond market. Similarly, while the investor base has widened for loans, banks are still the largest purchasers. Furthermore, these changes have fully developed only in the U.S. loan market, which is well ahead of most of the world.[25]

7. The Canadian Syndicated Loan Market and Syndication Activities of Canadian Banks in North America

Historically, there does not appear to have been the same demand or need to syndicate the loans of large Canadian borrowers as in the United States. There are several reasons for this lack of demand: the large size of the major banks relative to the domestic loan market and most corporate borrowers; the relatively low number of large borrowers in Canada; and the diversity of the banks' loan portfolios, given their extensive branch networks and coast-to-coast lending capacities. Previously, in other words, the need for banks to share risks and achieve regional and industry diversification was not as pressing as in the United States.

More recently, however, the Canadian market has been influenced by developments in the United States and globally, and Canadian borrowers have become increasingly aware of the new syndicated loan market's speed, efficiency, and cost-effectiveness. It has revealed its potential to Canadian banks for putting together very large financings of a size they have not seen before.[26]

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25. The U.K. market is probably closest to the United States in its level of development.
26. For example, in 2001, major syndicated transactions included a $4.5 billion *Telus* facility and a $4.2 billion *Quebecor* transaction.

The Canadian syndicated loan market does not, as yet, have all the features of its U.S. counterpart. For example, there is very little secondary market for loans in Canada. The Canadian syndication market has also lagged behind the U.S. market in terms of investor base; for instance, institutional investors in Canada do not yet appear to have recognized corporate loans as an asset class for their own investment purposes. As of early 2003, industry contacts estimated that there were only two or three large institutions investing in loans in Canada, compared with over 100 in the United States. The reasons for this reluctance may be due in part to general lack of familiarity, internal investment restrictions, and the relative stage of development of the Canadian syndicated loan market. Another hindrance may be the fact that there is no equivalent to the LSTA in Canada.

Table 5 shows the estimated activity of Canadian borrowers in the syndicated loan market.[27]

Table 5: Canadian Borrowers in the Syndicated Loan Market (gross issuance of facilities)

Year	**Canadian market** Value of issued credit facilities	**Canadian market** No. of credit facilities	**U.S. market** Value of issued credit facilities	**U.S. market** No. of credit facilities
1992	2,835[a]	16	1,335[a]	11
1993	6,971	22	24,230	28
1994	9,315	23	27,707	36
1995	36,806	58	18,026	24
1996	37,829	50	10,729	21
1997	54,291	97	7,621	20
1998	40,331	78	21,411	29
1999	57,664	129	7,754	31
2000	54,634	65	7,548	23
2001	73,818	106	6,290	15
2002	21,157	49	4,163	8

a. The numbers in this column are in Can$ millions.
Source: Thomson Financial; data to 31 July 2002

27. The data in Table 5 should be used with caution, because it is quite possible that not every facility issued by Canadian borrowers over this period is captured in the data set. The data, however, should be indicative of trends.

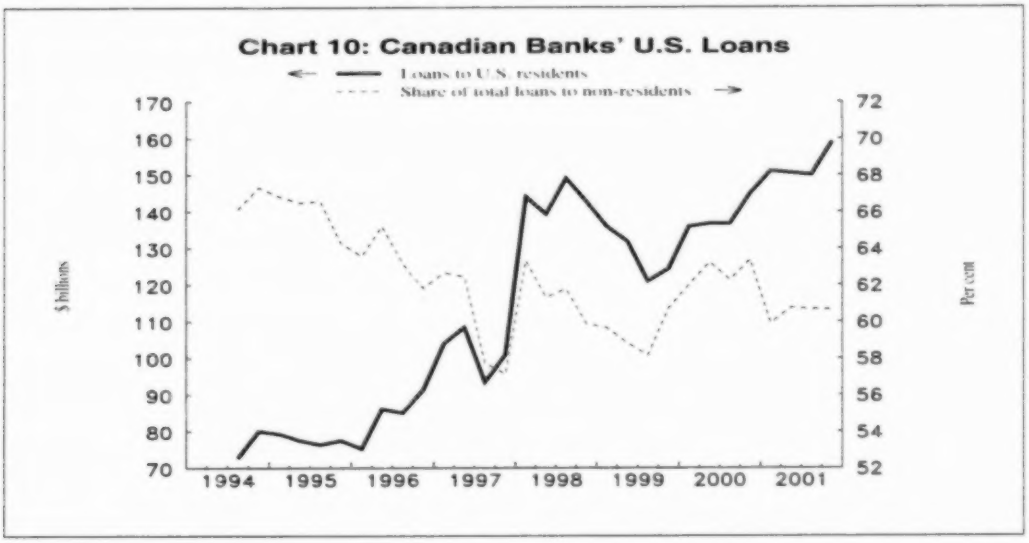
Table 5 breaks down credit facilities between those distributed in the Canadian market (columns 2 and 3) and those targeted at the U.S. market (columns 4 and 5). Columns 2 and 3 essentially comprise the Canadian syndication market, because foreign borrowers seldom use the Canadian-dollar market. The data indicate that the Canadian syndicated loan market (columns 2 and 3) has expanded substantially since 1992 (rising from 16 facilities to 129 facilities in 1999). Although the number of new facilities fell sharply in 2000, gross volumes declined only modestly, implying that the average size of facilities increased noticeably. It appears that as the Canadian market developed in the mid-1990s, Canadian borrowers began to rely relatively less on the U.S. market (columns 4 and 5).

In Canada, the Big Six domestic banks assume the vast majority of the lead bank roles. The number of participating banks in Canadian syndicates has come down in recent years, because of a reduction in participating foreign-owned Schedule II banks.[28]

Of course, as alluded to earlier, the large Canadian banks have not limited themselves to operating in the domestic syndicated loan market. They have, in fact, been involved in the U.S. syndicated loan market for many years and, to a lesser extent, in Europe and other markets. In the United States, they can also be lead banks, but more frequently they share that role with a U.S. bank or take a lesser role as a participating bank.

Lending in the U.S. market is a natural outlet for Canadian banks and a way to grow beyond the confines of the Canadian market. It allows for geographical diversification in a familiar political and economic environment, as well as sectoral diversification by lending to industries that may not be well-represented in the Canadian economy. Chart 10 shows that U.S. loans (loans to U.S. residents) comprise about 60 per cent of all foreign lending by Canadian banks. Contacts in the banking industry indicate that a substantial amount if not the majority of this lending has been accomplished through the U.S. syndicated loan market.

28. Some foreign banks have merged or shut down their Canadian subsidiaries as part of a global adjustment to problems in their home country. Others have remained but reduced their lending in Canada due to an inability to meet their target rates of return.



Syndicated lending in the United States is just one dimension of the Canadian banks' thrust in the 1990s into an array of U.S. capital market activities, ranging from derivatives and securitizations to underwriting high-yield bonds and providing M&A advisory services.

Several of the large Canadian banks have developed an expertise in lending to the telecom and cable sector, which grew to represent their largest sectoral exposure in the U.S. loan market (Standard & Poor's 2000). For some banks, this area of lending interest goes back to the late 1960s, when they were among the first banks to provide financing to the cable industry. This development also reflects the importance of communications in a country as large as Canada, and the fact that Canada has some companies that are global players in this industry.

The consensus among the ratings agencies (for example, Moody's 2002) and other banking analysts seems to be that, although the Canadian banks have become more active in the syndication market, and have assumed greater exposures via that market, they have implemented more sophisticated credit-risk management systems and have become adept at using credit-risk-transfer instruments, such as credit derivatives and loan sales, to manage these exposures. Thus, they have largely avoided assuming excessive credit risk from any single borrower.

8. Risk Considerations

Major new innovations in financial instruments can change the distribution of risks between institutions. Several risks are related to the contemporary syndicated loan market.

8.1 Credit-risk transfer

Loan syndication—with regards to both in its primary distribution and secondary loan trading aspects—is one of the various tools that financial institutions can use to take on or shed credit risk (BIS 2003). Credit-risk-transfer instruments have been around for years in the form of credit guarantees and credit insurance. Over the past decade, loan syndication has become more prominent, as have asset securitizations and credit derivatives (Kiff and Morrow 2000).[29]

Markets in credit-risk transfer can help to more efficiently allocate credit risk in the economy. Syndications effectively represent a pooling of financing resources, which offers the potential for a broader dispersion of credit risk, including transfers to institutional investors such as insurance companies and investment funds, and even to non-regulated entities such as hedge funds. This is increasingly the case in the U.S. market but, to date, much less so in Canada. If banks truly hold more diversified credit portfolios as the result of the syndication process, they will arguably be less vulnerable to idiosyncratic or sectoral asset-price shocks. Syndication offers another means of achieving greater risk diversification, but only if banks choose to use it that way; for example, if syndications permit much larger loans to be undertaken and banks assume correspondingly larger participations in these loans, they may not be, in the end, less vulnerable.

Similarly, the ultimate significance of the transfer of credit risk from the banking system to other financial sectors is difficult to gauge. On the one hand, it means that risks are being shared across sectors as well as institutions, offering broader diversification. On the other hand, the result may be more complex linkages between financial sectors that are not completely understood.[30]

8.2 The lead bank and the firm-commitment underwriting process

As stated earlier, it is not uncommon for the lead bank to commit to underwrite the whole amount of the financing and then to sell loan shares to syndicate participants. This firm commitment is often crucial for a borrower that needs to know that funding is in place to support an imminent

29. Asset securitizations involve the sale of loans by the originator to a special-purpose vehicle that issues tranches of securities backed by the cash flow of the loans. Credit derivatives include a range of instruments that permit credit risk to be transferred without the funding obligation.

30. See Rule (2001) for a detailed discussion of this range of issues.

merger, acquisition, buyout, or other strategic corporate transaction. The lead bank assumes the funding and credit risk that other banks may not join as lenders. In other words, during the loan distribution period, the lead bank assumes risks similar to those of an investment bank when it undertakes a bought deal type of securities underwriting.

These risks are mitigated by the fact that syndicated loan agreements usually have material adverse change (MAC) clauses that specify predetermined grounds for legitimate retraction of the commitment by the lender. Market-MAC clauses are related to extraordinary adverse market developments. Company-specific MAC clauses are often included, to deal with extraordinary developments related to the company itself, such as fraud, accounting irregularities, or criminal negligence. Although rarely invoked, MAC clauses are intended to protect the lead bank against most extreme events, at least in the period prior to the loan drawdown.

Syndications also involve normal market risk. The lead bank makes a commitment to the borrower based on terms that it believes are acceptable to the marketplace (that is, to other banks). If the agent bank has misjudged the market (and the borrower is unwilling to accept modifications to the initial terms), the lead bank may have to retain a larger proportion of the loan than it had planned for.[31] If it tries to reduce or hedge its position in the secondary market, it will face financial loss.

Increasingly, market risk is being managed in the loan contract through a protective clause known as "market flex." Market-flex pricing has become more and more prevalent since the period of extreme market volatility that immediately followed the August 1998 Russian-default Long-Term Capital Management market crisis. Market-flex pricing gives the lead bank a certain scope to vary the spread over the base rate of the loan (for example, LIBOR or the prime rate) by a certain number of basis points, depending on market conditions at the closing of the loan. Market flex applies in both directions and can work to the benefit of the borrower when market conditions become more favourable.[32]

In summary, the firm-commitment process, which has become prevalent in contemporary syndications, poses real risks for the lead bank. Contractual arrangements seem to be evolving in a way that reduces these risks and allows for their management, but only time will tell how successfully.

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31. In this case, market conditions might have suddenly changed on the lead bank, but not to an extent that would justify invoking a MAC clause, which relates only to extraordinary events.

32. Price risk is also reduced after the new issue period by contractual terms in many loan contracts that permit a loan to be repriced (i.e., increase the spread over the base rate) if the borrower is subject to a credit downgrade. This type of provision is often referred to as a ratings-trigger clause.

8.3 The lead bank, moral hazard, and information asymmetries

The role of the lead bank has evolved from one of primarily representing a group of banks that share a large loan to one of intermediating the competing interests of its client—the borrower—and the participating banks. Because the lead bank tends to operate like an investment banker whose first priority may be to obtain recurring business from the borrower, there is the potential for this shift to occur at the expense of the participating banks. The information asymmetry between lead banks and syndicate members could potentially allow the lead bank to engage in opportunistic behaviour, such that they would retain a larger share of high-quality loans and a lower share of low-quality loans than would be retained if there were no information asymmetries.

To date, however, the empirical work finds little evidence of such abuse.[33] This likely reflects the fact that the lead bank needs to maintain its reputation among prospective lending participants, to ensure continued participation in syndicates arranged by the lead bank. Furthermore, the increasing tendency for credit-rating agencies to rate loans provides participating banks with third-party assessments. And the lead bank often ends up holding the largest piece of the syndication.

8.4 Loan monitoring

Under traditional bilateral lending arrangements, the commercial bank has intimate knowledge of the borrower's affairs and is in a position to quickly detect adverse developments with respect to the creditor. Under a syndicated loan arrangement, there is the potential for this arrangement to be weakened, as the loan holding becomes more like a securities position. The lead bank may be the only bank in the syndicate to have a significant relationship with the borrower (although this is not necessarily the case). Because the lead bank can easily reduce its exposures to the borrower through secondary loan sales or credit-derivative transactions, the motivation to diligently monitor the loan can potentially be compromised. On the other hand, the lead bank can be held legally liable if it neglects its responsibilities.

To date, there appears to be no empirical evidence that the monitoring function has weakened. The majority of participating banks still do their own credit assessments and utilize the research

33. Simons (1993) finds that the proportion of the syndication retained by the lead bank actually increased as credit quality declined. A more recent study by Jones, Lang, and Nigro (2000) involves a regression analysis of a large panel of SNC loan data from 1995 to 1999. They find that agent banks tend to retain a larger proportion of their lower-quality loans, refuting the notion of opportunistic behaviour. They do find, however, that some agent banks that specialize in originating low-quality loans tend to retain a smaller proportion of the loans; i.e., they syndicate a larger proportion.

of the ratings agencies and secondary loan market information, such as credit spreads. And, as stated earlier, reputational considerations are important in this case.

9. Conclusion

The rapid development of the syndicated loan market over the past decade is a notable development that has increased the efficiency and transparency of corporate loan markets. Like most financial innovations, its development has reflected particularly historical circumstances. The result is a financial instrument that better serves the needs of the various agents involved in the market.

Arguably, the new corporate loan market is one facet of a surge in the use of credit-risk-transfer instruments that includes credit derivatives and securitizations. This development points to an important change in the business of banking, as loans become more like tradable securities.

Major new developments in financial instruments and markets such as the contemporary syndicated loan market typically pose risks that can be assessed only over time. In the case of syndicated loans, the instrument offers the potential for a broader dispersion of credit risk that ultimately should be constructive for financial stability.

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